

15. BALTIMORE TO HEAD OF CHESAPEAKE BAY

(1) This chapter describes the northern part of Chesapeake Bay and the many tributaries that empty into it, including the more important Patapsco, Elk, and Susquehanna Rivers. Also described is the major port of Baltimore and several smaller ports and landings in this part of the bay.

(2) **COLREGS Demarcation Lines.**—The lines established for Chesapeake Bay are described in **80.510**, chapter 2.

(3) **Chart 12273.**—Patapsco River forms Baltimore Harbor, and Elk River is the approach to the Chesapeake and Delaware Canal. The other tributaries that empty into this part of the bay are seldom used by vessels drawing more than 12 feet. The shores are mostly wooded in the undeveloped areas and rise to considerable heights in the vicinity of Northeast and Susquehanna Rivers.

(4) There are extensive shoal areas in the upper part of the bay, and **fishtraps** are numerous in season; fishtrap limits are shown on the chart. All of the tributaries are usually closed by ice for extended periods during the winter.

(5) **Chart 12278.**—Sandy Point Shoal Light and Baltimore Light, respectively 131.5 and 134.2 miles above the Virginia Capes, were described in chapter 13. The channel to Baltimore and the channel to the head of Chesapeake Bay divide at 0.5 mile eastward of Sandy Point Shoal Light.

(6) **Sevenfoot Knoll Light** (39°09.3'N., 76°24.5'W.), 58 feet above the water, is shown from a skeleton tower on the northeast side of the channel to Baltimore, 140.1 miles from the Capes.

(7) **Caution.**—Large vessels transiting Craighill Channel Upper Range and Brewerton Channel Eastern Extension in the vicinity of Sevenfoot Knoll Light may generate large and dangerous wakes; waves as high as 10 to 12 feet have been reported. Small craft in the area are advised to use extreme caution.

(8) **Baltimore Harbor** consists of the entire Patapsco River and its tributaries; a part of the waterfront thus included lies outside the municipal limits of Baltimore, but by State law is within the jurisdiction of the Maryland Port Administration.

(9) **Patapsco River** joins the west side of Chesapeake Bay between Bodkin Point and **North Point**, 4 miles to the northward; the midchannel point in the entrance, 2 miles northwest of Sevenfoot Knoll Light, is 142.1 miles above the Virginia Capes, and 54 miles from Delaware River by way of the Chesapeake and Delaware Canal.

(10) **Channels.**—Federal project depths are: 50 feet in the main channel between the Virginia Capes and Fort McHenry, Baltimore; thence 42 feet in Ferry Bar Channel (east section); thence 49 feet in Northwest Harbor East Channel and turning basin; thence 40 feet in Northwest Harbor West Channel and turning basin; and 50 feet in Curts Bay Channel. The Federal project in the main channel between the Delaware Capes and Baltimore via the Chesapeake and Delaware Canal is 35 feet.

(11) The channels are maintained at or near project depths. (See Notice to Mariners and latest editions of the charts for controlling depths.)

(12) **Bodkin Point** is the low northeastern extremity of **Bodkin Neck**, on the south side of the entrance to Patapsco River. Shoals extend northward and eastward from the point to the edge of the main channel.

(13) **Bodkin Creek**, which flows into Patapsco River along the inner side of Bodkin Neck, has depths of 9 feet in the approaches and 7 to 9 feet for considerable distances into its branches. The channel is very narrow at the mouth and leads between extensive shoals. Shoaling to 3 feet is reported in the entrance to the creek between Daybeacon 9 and Light 11; mariners are urged to use caution in this area.

(14) **Back Creek** is on the northeast side of Bodkin Creek just inside the mouth. A boatyard is in the upper part of the creek. Gasoline and slips are available. Hull and engine repairs can be made; marine railway, 50 tons; lift, 5 tons.

(15) **Main Creek** is separated from Back Creek by **Spit Neck**. Both branches have depths of 7 to 9 feet almost to their heads and are much used by pleasure craft.

(16) Several marinas are on **Graveyard Point**, on the south side of Main Creek 0.2 mile above the mouth. Gasoline, diesel fuel, slips, and some marine supplies can be obtained. Hull and engine repairs can be made. Largest haul-out capacities are: railway, 55 feet; lift, 5 tons.

(17) A wreck is reported about 300 yards southeastward of Graveyard Point.

(18) A marina at the entrance to **Perry Cove**, 1.3 miles above the mouth of Main Creek, has gasoline and some marine supplies. Hull and engine repairs can be made; lift, 30 tons.

(19) **Rock Point** is on the southwest side of Patapsco River 3 miles above Bodkin Point. Back of Rock Point is an elevated water tank, and a pier extends out from the Rock Creek side to depths of 5 feet or more. **White Rocks**, 0.6 mile northwest of Rock Point, are about 15 feet high and marked by a light; the deepest water is north and west of the rocks.

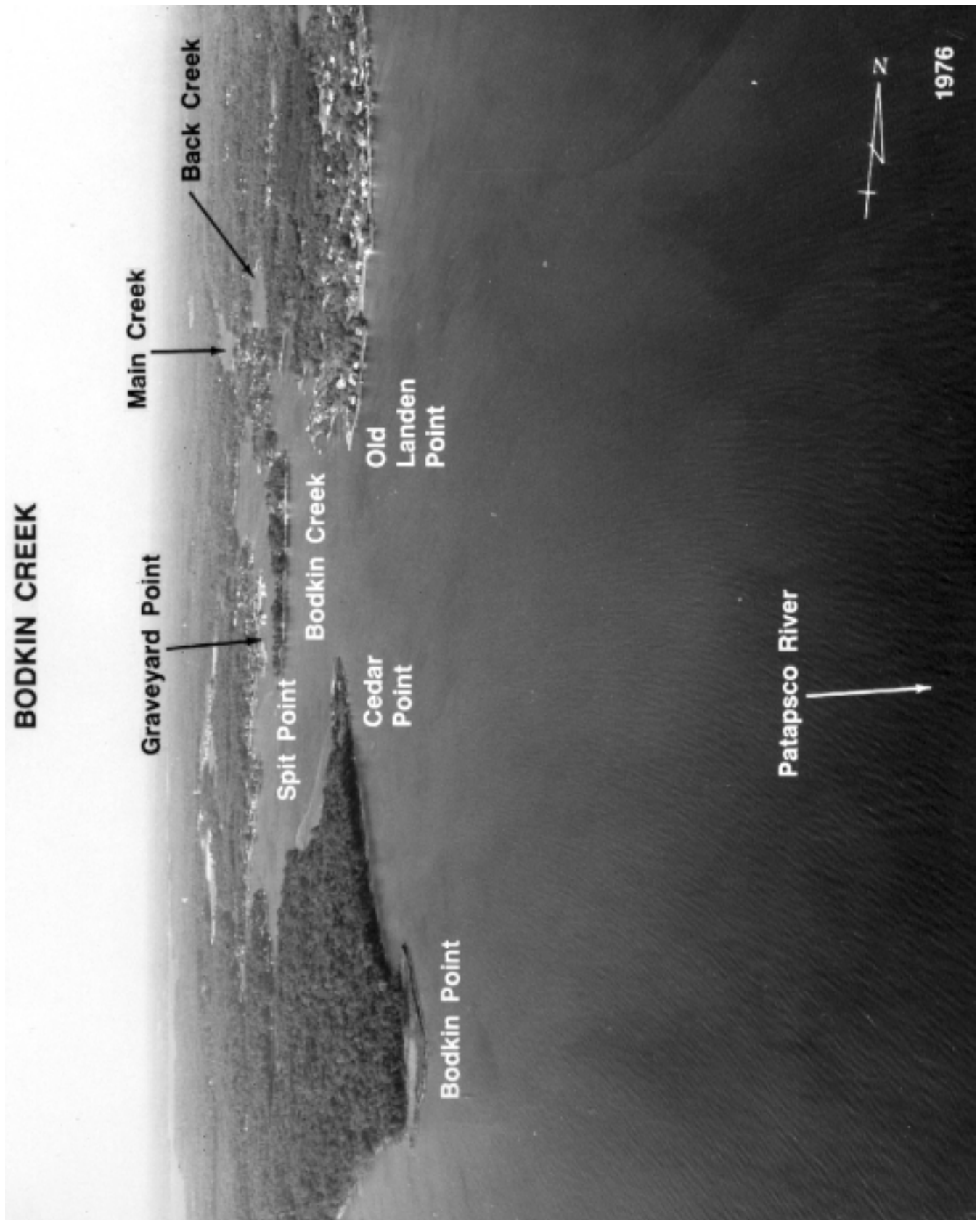
(20) A **130°–310°** measured course, 1,000 yards long, is 1 mile eastward of Rock Point (39°10.0'N., 76°28.7'W.). The course is marked by private seasonal buoys.

(21) **Rock Creek**, on the northwest side of Rock Point, has depths of 11 feet almost to the head. It is marked; a light on the east side marks the narrow part of the channel off **Fairview**, 0.5 mile above the mouth.

(22) **Wall Cove** empties into the southeast side of Rock Creek along the south side of Fairview. In 1991, centerline controlling depths of about 10 feet were reported available for most of its length but gradual shoaling to about 5 feet had occurred near the head of the cove. The Maryland Yacht Club piers on the Fairview side of the entrance have depths of about 13 feet at their outer ends.

(23) There are several marinas and boatyards in Wall Cove and along Rock Creek where marine supplies, gasoline, diesel fuel, and water can be obtained. Largest haul-out capacities for hull and engine repairs are: marine railway, 50 feet; lift, 50 tons.

(24) **Stony Creek**, on the southwest side of Patapsco River 5 miles above Bodkin Point, has depths of 12 feet or more almost to the head. The channel along the west side of the entrance is about 70 yards wide and marked by a light and buoys; the east side is obstructed by rocks, some of which bare at all stages of the tide. The State Route 173 highway bridge 0.8 mile above the mouth of Stony Creek has a 40-foot bascule span with a clearance of 18 feet. The bridgetender monitors VHF-FM channel 16 and works on channels 13 and 68; call sign KAJ-667. (See **117.1 through 117.59 and 117.573**, chapter 2, for drawbridge regulations.) A marina on the north side just above the bridge has gasoline.



(25) **Nabbs Creek**, a tributary on the northwest side of Stony Creek, 1 mile above the mouth, has depths of 12 feet almost to the head. A marina near the head of the creek has gasoline, diesel fuel, berths, and marine supplies. Hull and engine repairs can be made. A marine railway can handle craft up to 60 feet; a 15-ton lift is available.

(26) **Back Cove**, on the north side of Nabbs Creek near the mouth, has depths of 12 feet to a boatyard 0.3 mile above the entrance. The marine railway can handle craft up to 60 feet for hull and engine repairs; gasoline is available.

(27) **Old Road Bay**, which empties into the north side of Patapsco River along the west side of North Point, has general depths of 7 to 12 feet. A rock with a depth of 1 foot is about 1.1 miles northwest of North Point; a light marks the edge of a shoal that extends westward from North Point; a light 0.25 mile off the north shore of the bay marks a shoal that extends 0.5 mile from the west shore. In 1970, an underwater obstruction was reported about 150 yards south of the light; mariners are advised to exercise caution in this area.

(28) **North Point Creek** and **Jones Creek**, which empty into the northeast and northwest corners of Old Road Bay, respectively, have depths of 4 to 6 feet. Approach both creeks by passing eastward of the light off the north shore of the bay, being careful to avoid the reported underwater obstruction about 150 yards south of the light. Small-craft facilities are in both creeks.

(29) **Charts 12281, 12278.—Baltimore**, one of the major ports of the United States, is at the head of tidewater navigation on Patapsco River. The midharbor point, at the intersection of Fort McHenry and Ferry Bar Channels 0.6 mile southeast of Fort McHenry, is 8 miles from the mouth of the river, 150 miles above the Virginia Capes, and 62 miles from Delaware River.

(30) Principal imports are general cargo, crude petroleum and petroleum products, iron ore, chrome and manganese, gypsum, lumber, motor vehicles, fertilizers, sugar, and bananas; exports are chiefly general cargo, grains, metal products, coal, and chemicals. Coastwise receipts are crude petroleum and petroleum products, fertilizers, sulfur, sugar, and lumber; shipments are mostly petroleum and metal products.

(31) **Channels**.—Federal project channels were discussed at the beginning of the chapter. The branch channels will be covered in the descriptions of the tributaries.

(32) **Anchorages**.—General, dead ship, and small-craft anchorages are in Baltimore Harbor. (See **110.1** and **110.158**, chapter 2, for limits and regulations.)

(33) **Tides and currents**.—The mean range of tide is 1.1 feet at Baltimore; daily predictions are given in the Tide Tables. Prolonged winds of constant direction may cause substantial variation in the tide. Currents in the harbor are 0.8 knot on the flood and ebb. (See the Tidal Current Tables for daily predictions.) In May 1981, strong currents were reported in the vicinity of Fort Carroll and Brewerton Angle on the change of tides.

(34) **Weather**.—Baltimore is in a region about midway between the rigorous climates of the North and the mild climates of the South and adjacent to the modifying influences of the Chesapeake Bay and Atlantic Ocean to the east and the Appalachian Mountains to the west. The net effect is to produce a more equable climate compared to inland locations of the same latitude.

(35) Rainfall distribution throughout the year is rather uniform; however, the greatest intensities are confined to the summer and early fall, the season for hurricanes and severe thunder-

storms. Rainfall during this period occurs principally in the form of thundershowers, and rainfall totals during these months vary appreciably, depending on the number of thundershowers which occur largely by chance in a given locality. Hurricane force winds, however, may occur on rare occasions due to a severe cold front or a severe thunderstorm. The greatest damage by hurricanes is that produced along waterfronts and shores by the high tides and waves.

(36) In summer, the area is under the influence of the large semipermanent high-pressure system commonly known as the Bermuda High and centered over the Atlantic Ocean near latitude 30°N. This high-pressure system brings a circulation of warm, humid airmasses over the area from the deep South. The proximity of large water areas and the inflow of southerly winds contribute to high relative humidities during much of the year.

(37) January is the coldest month, and July, the warmest. Winter and spring have the highest average windspeeds. Snowfall occurs on about 25 days per year on the average; however, an average of only 9 days annually produce snowfalls greater than 1.0 inch. Although heaviest amounts of snow generally fall in February, occasional heavy falls occur as late as March. Records for the period, August 1950 through December 1967, indicate that the average date of the last temperature as low as 32° in the spring is April 15, while the average date of the first temperature as low as 32° in the autumn is October 26.

(38) Glaze or freezing rain occurs on an average of two to three times per year, generally in January or February. However, some occurrences have been noted in November and December. Some years pass without the occurrence of freezing rain, while in others it occurs on as many as 8 to 10 days. Sleet is observed on about 5 days annually. The sleet season begins as early as November in some years, and ends as late as March in some cases, with the greatest frequency of occurrence in January.

(39) The National Weather Service office is at Baltimore-Washington International Airport, about 7 miles southward of Baltimore. **Barometers** may be compared there or by telephone. (See page T-10 for **Baltimore climatological table**.)

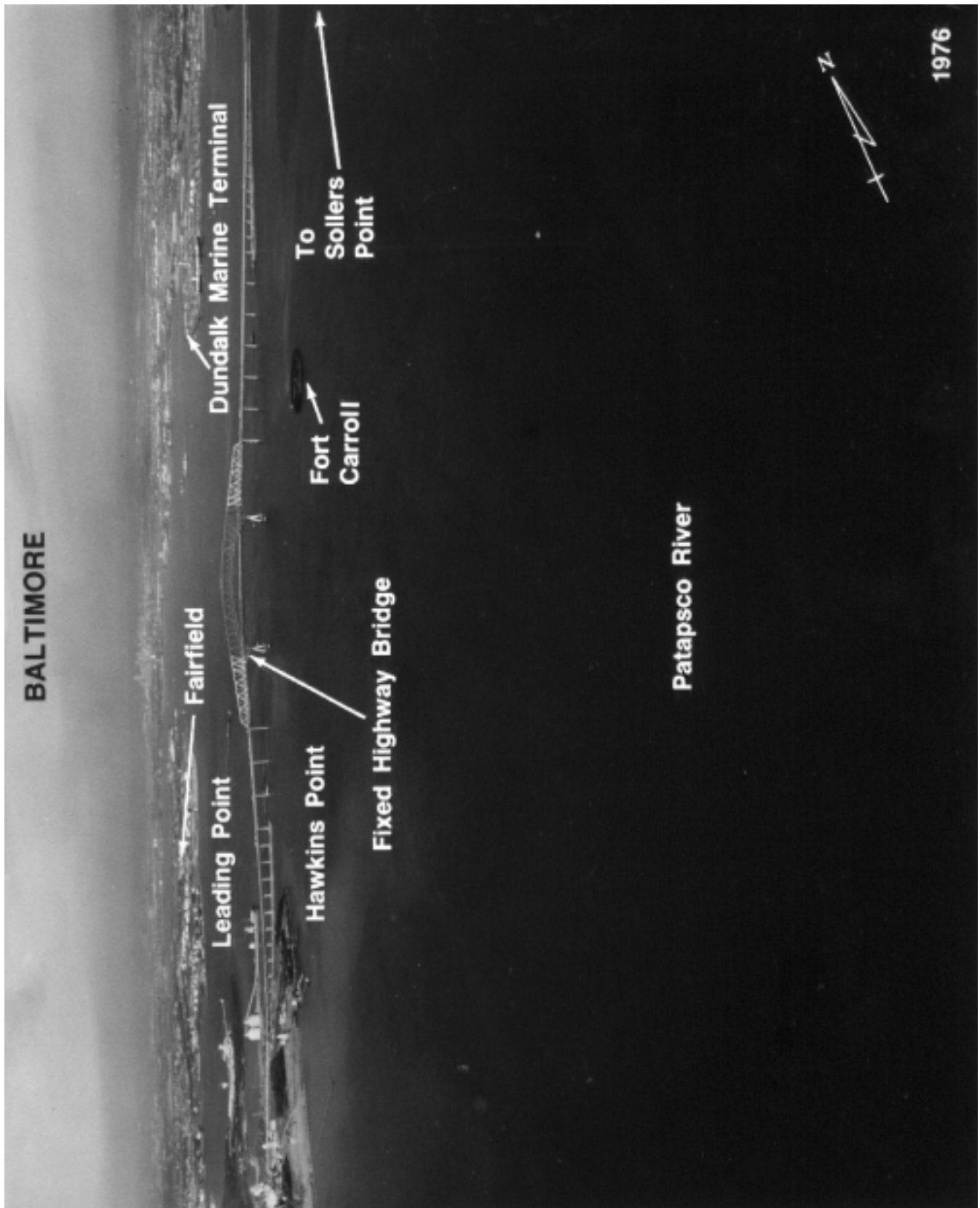
(40) **Fogs** occur chiefly from October to March, inclusive. From April to September there are only a few days with dense fogs. Very light winds clear the fog away.

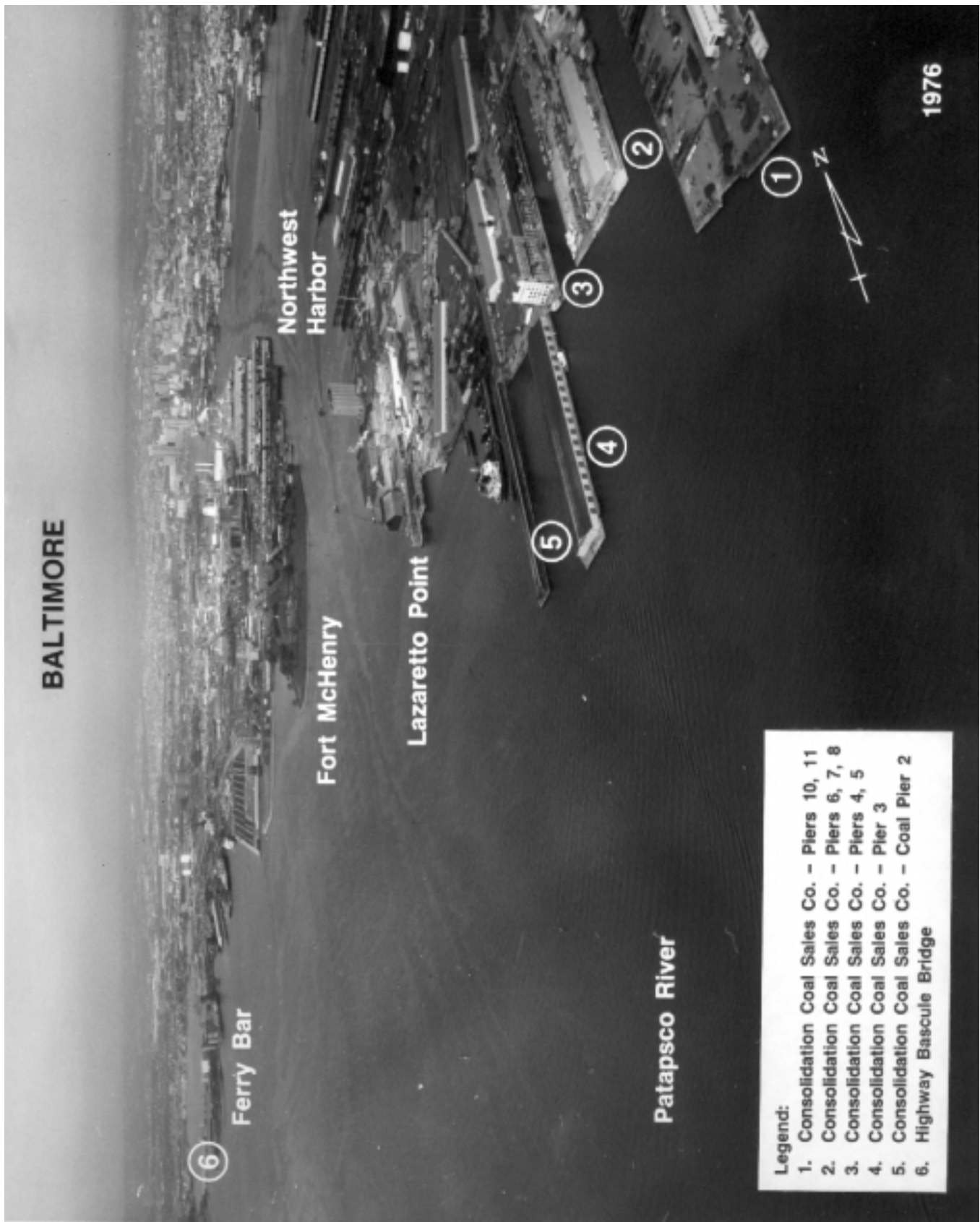
(41) **Ice**.—Baltimore Harbor is frozen over during severe winters, but the ice-breakers and the larger power-driven vessels keep the dredged channels open so that self-propelled vessels seldom have difficulty in entering the harbor. Ice conditions in the main channel are most severe in the vicinity of Sevenfoot Knoll Light, where ice moving from the northern end of Chesapeake Bay tends to collect in packs. Navigation from Baltimore to the upper end of the bay and the Chesapeake and Delaware Canal is likely to be interrupted by ice for short periods during an average winter.

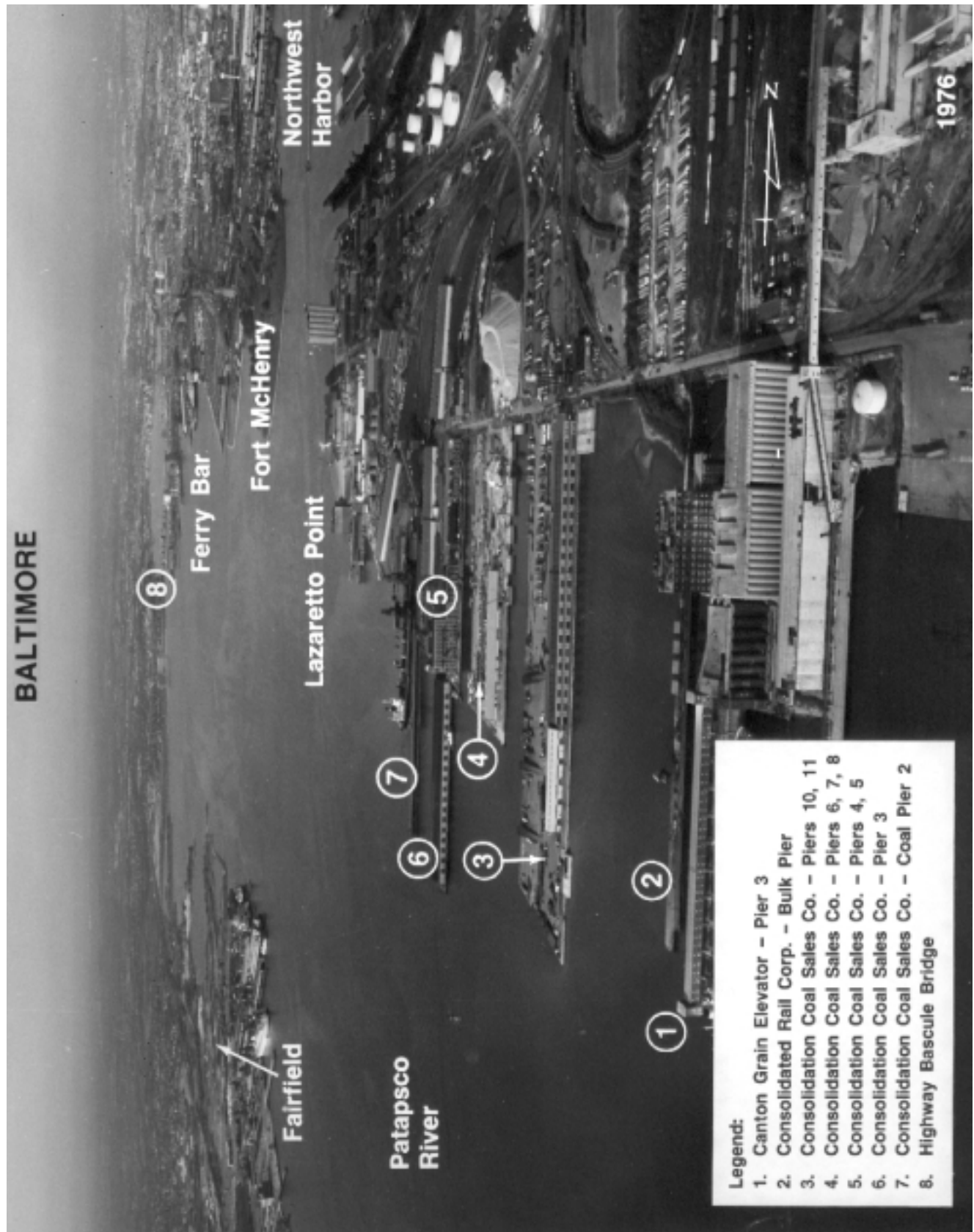
(42) During the ice navigation season, the waters described in this chapter are a **regulated navigation area**. (See **165.503**, chapter 2, for limits and regulations.)

(43) **Pilotage, Baltimore**.—Pilotage is compulsory for all foreign vessels and for U.S. vessels under register in the foreign trade bound to or from the port of Baltimore. Pilotage is optional for U.S. vessels under enrollment in the coastwise trade who have on board a pilot licensed by the Federal Government for these waters.

(44) The Association of Maryland Pilots has an office in Baltimore (telephone: 410-342-6013, fax 410-276-1364, telex:







87-574 **MARPILOTS BALTIMORE**, cable address: MARPILOT BALTIMORE). They provide service to any port in Maryland and service between Baltimore and the entrance of the Chesapeake Bay at Cape Henry, VA. The pilot office also monitors VHF-FM channel 11.

(45) The Chesapeake and Interstate Pilots Association offers pilot services to U.S. vessels, engaged in the coastwise trade, and public vessels to or from Baltimore, via the Chesapeake Bay if the vessel is entering from sea at Cape Henry or transiting between any port or place on the Chesapeake Bay and its tributaries. Pilot service is also offered to vessels to or from Baltimore that are transiting the Chesapeake and Delaware Canal. Pilots will meet vessels upon prior arrangement at Cape Henlopen or any port or place on the Delaware Bay and River, at Cape Henry or any port or place on the Chesapeake Bay and its tributaries. Pilots will also provide all pilot services required from the port of departure to the port of arrival. Arrangements for pilots may be made through the ships' agents or the pilot office in Norfolk (telephone, 757-855-2733).

(46) The Interports Pilots Agency, Inc. offers pilotage to public vessels and U.S. vessels in the coastwise trade transiting between Baltimore, via the Chesapeake and Delaware Canal, and many ports northeast. (See Pilotage, chapter 3.)

(47) Pilotage information for incoming vessels is given in chapters 6, 7, and 9.

(48) **Towage.**—Tugs up to 3,800 hp are available at all times to assist vessels arriving or departing, in docking or undocking, and in shifting within the harbor. Long-distance towage is also available. Tug services are usually arranged far in advance through ships' agents.

(49) **Quarantine, customs, immigration, and agricultural quarantine.**—(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

(50) **Quarantine** is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

(51) Baltimore is a **customs port of entry**.

(52) **Coast Guard.**—A **Marine Safety Office** is in Baltimore. (See appendix for address.)

(53) **Harbor regulations.**—The Maryland Port Administration has general jurisdiction over the physical operation of Baltimore Harbor and issues rules and regulations pertaining to the use of the public wharves and piers. The Port Administration office is at the World Trade Center Baltimore, Baltimore, Md. 21202.

(54) **Wharves.**—Baltimore has more than 200 piers and wharves at Locust Point, Port Covington, Fairfield, Curtis Bay, Hawkins Point, Sparrows Point, Dundalk, Lower Canton, Canton, Lazaretto Point, and in the Inner Harbor. Only the deep-draft facilities are described. For a complete description of the port facilities refer to Port Series No. 10, published and sold by the U.S. Army Corps of Engineers. (See appendix for address.) The alongside depths for the facilities described are reported depths. (For information of the latest depths contact the Maryland Port Administration or the private operator.) All of the facilities have direct highway connections, and most have railroad connections. Water and electrical shore-power connections are available at most piers and wharves.

(55) General cargo at the port is usually handled by ship's tackle; special handling equipment, if available, is mentioned in the description of the particular facility. There are 22 traveling, container cranes with lift capacities from 27½ to 50 long tons and

5 full-portal gantry cranes with lift capacities up to 100 tons at the Port of Baltimore. Numerous warehouses and cold storage facilities adjacent to the waterfront are available. Several municipal piers, administered by the city harbormaster whose office is on Municipal Pier 4, are used mainly by coastwise vessels.

(56) **Facilities at Locust Point:**

(57) **Tate & Lyle North American Sugars, Baltimore Refinery, Raw Sugar Dock** (39°16'31"N., 76°36'44"W.): 1,040 feet of berthing space with dolphins; 38 feet alongside; deck height, 7 feet; 12-ton buckets and 40-inch conveyor belt, unloading rate, 300 tons per hour; receipt of bulk raw sugar; mooring vessels; owned and operated by Tate & Lyle North American Sugars, Inc.

(58) **Maryland Port Administration, North Locust Point Terminal, Piers 10 through 3:**

(59) Pier 10 (39°16'30"N., 76°35'19"W.): 580 feet of berthing space; 31 to 34 feet alongside; deck height, 11 feet; receipt of molasses and liquid latex by vessel and barge; owned by Maryland Port Administration and operated by Westway Terminal Co., Inc. and Ennar Latex, Inc.

(60) Pier 7 (39°16'23"N., 76°35'08"W.): east side 1,000 feet long; west side 820 feet long; face 50 feet long; 40 feet alongside; deck height, 10 feet; grain elevator with 3.2-million-bushel capacity, four conveyor booms with 60,000 bushel per hour loading rate, trackage serving three loading spouts; shipment of grain by vessel and occasional receipt and shipment by barge; owned and operated by ADM/Countrymark, Inc.

(61) Piers 4 and 5 (39°16'18"N., 76°34'57"W.): 375-foot face, east and west sides 1,200 feet long; 35 to 34 feet alongside; deck height, 9 feet; 130,000 square feet covered storage, 30 acres open storage, storage tanks with 1.46 million gallon total capacity; two traveling revolving gantry cranes to 87 tons, pipelines; receipt of paper products and liquid latex; receipt and shipment of conventional general cargo; owned by Maryland Port Administration and operated by Balterm (Baltimore Forest Products Terminals); Guthrie Latex, Inc.; and Firestone Tire & Rubber Co., Natural Latex Division.

(62) Pier 3 (39°16'15"N., 76°34'52"W.): 270-foot face, 35 to 38 feet alongside, deck heights, 5 and 9 feet; west side 1,212 feet long, 34 to 38 feet alongside, deck height, 9 feet; east side 1,230 feet long, 18 to 33 feet alongside, deck height, 5 feet; 137,000 square feet covered storage; receipt and shipment of paper products and liquid latex; receipt and shipment of conventional general cargo; owned by Maryland Port Administration and operated by Balterm (Baltimore Forest Products Terminals) and Firestone Tire & Rubber Co., Natural Latex Division.

(63) **Maryland Port Administration, South Locust Point Marine Terminal**, Berth No. 9; (39°15'50"N., 76°35'54"W.): 1,139-foot face; 35 feet alongside; deck height, 9 feet; 273,000 square feet covered storage; 8½ acres open storage; mooring vessels for storage; owned and operated by Maryland Port Administration.

(64) **Maryland Port Administration, South Locust Point Marine Terminal**, Berths 10, 11 and 12 (39°15'43"N., 76°35'34"W.): 2,050-foot face; 36 feet alongside; deck height, 9 feet; three 40-ton traveling container cranes, 100-ton traveling gantry crane; 28 acres of open container storage; receipt and shipment of conventional, containerized, and roll-on/roll-off general cargo; receipt and shipment of machinery and steel products in foreign and domestic trade; owned by Maryland Port Administration; operated by International Terminal Operating Corp. of Baltimore.

(65) **Facilities at Fairfield:**

(66) **Hobelmann Port Services, Baltimore Terminal Pier** (39°14'57"N., 76°34'36"W.): west side, 825 feet of berthing space with dolphins; 34 feet alongside; east side, 575 feet of berthing space; 32 feet alongside; deck height, 6 feet; 53 acres open storage; receipt and shipment of automobiles and roll-on/roll-off general cargo; owned by Hobelmann Port Services, Inc., and operated by Atlantic Venture, Inc.

(67) **ST Services, Baltimore Terminal Pier** (39°14'57"N., 76°34'23"W.): 1,110 feet of berthing space with platform; 33 feet alongside; deck height 10.2 feet; 49 storage tanks, capacity 34.48-million-gallons; receipt and shipment of miscellaneous bulk liquid commodities; owned and operated by ST Services, Inc.

(68) **Liquid Transfer Terminal, Front Wharf** (39°14'24"N., 76°33'53"W.): 582 feet with dolphins; 30 feet alongside; deck height, 6 feet; receipt of liquid latex, asphalt, and petroleum products; owned by Liquid Transfer Terminal, Inc., and operated by Liquid Transfer Terminal, Inc., Chevron Products Co., and Stratus Petroleum Corp.

(69) **Condea Vista Co. Pier** (39°14'27"N., 76°33'45"W.): 600 feet of berthing space; 30 feet alongside; deck height, 9 feet; receipt and shipment of miscellaneous liquid chemicals, including paraffin, benzene, and alkalates; receipt of fuel oil; owned and operated by Condea Vista Co., Inc.

(70) **Facilities in Curtis Bay:**

(71) **Citgo/Tosco, Baltimore Pier** (39°13'30"N., 76°34'02"W.): west side, 435 feet long with dolphins; 23 feet alongside; deck height, 8 feet; receipt and shipment of petroleum products by vessel and barge; owned and operated by Citgo Petroleum Corp., and Tosco Refining Corp.

(72) **CSX Transportation, Chesapeake Bay Ore Pier** (39°13'33"N., 76°34'51"W.): 800 feet of berthing space with dolphin; 42 feet alongside; deck height, 8 feet; two electric gantry cranes with 100-ton receiving hoppers; conveyor belt to 600-ton receiving hopper, unloading capacity 2,000 tons per hour; receipt and shipment of miscellaneous bulk materials, including ore, salt, fertilizer, and stone in foreign and domestic trades; owned and operated by CSX Transportation, Inc.

(73) **CSX Transportation, Chesapeake Bay Coal Pier** (39°13'23"N., 76°34'36"W.): north side 900 feet long, 30 feet alongside; south side 900 feet long, 42 feet alongside; deck height, 8 feet; north side, conveyor loading system, loading capacities 4,000 ton per hour; south side, 6,000 tons per hour; shipment of coal and stone by barge and vessel; owned and operated by CSX Transportation, Inc.

(74) **CSX Transportation, Chesapeake Bay Shiploader No. 2 Pier** (39°13'16"N., 76°34'34"W.): north and south sides 909 feet long; 50 feet alongside; deck height, 9.5 feet; 6,000-ton-per-hour loading tower; shipment of coal by barge and vessel; owned and operated by CSX Transportation, Inc.

(75) **General Chemical, Main Wharf** (39°12'57"N., 76°34'56"W.): 800 feet of berthing space with dolphins; 26 feet alongside; deck height, 7 feet; receipt of asphalt, sulfuric acid, and potash; owned by Olin Corp., Olin Chemicals Group and operated by Olin Corp. and General Chemical.

(76) **Amerada Hess Corp., Baltimore Terminal Pier** (39°12'46"N., 76°34'48"W.): north side 700 feet long with dolphins; south side 500 feet long with dolphins; 24 to 35 feet alongside; deck height, 6 feet; receipt and shipment of petroleum products, bunkering tankers berthed at pier, loading barges for

bunkering vessels at berth in harbor; owned and operated by Amerada Hess Corp.

(77) **Amoco Oil Co., Curtis Bay Terminal Dock** (39°12'37"N., 76°34'54"W.): 285-foot face with dolphins; 35 feet alongside; deck height, 6 feet; receipt and occasional shipment of petroleum products by barge and small tanker; owned by Amoco Oil Co. and Bitumar USA, Inc., and operated by Amoco Oil Co.

(78) **W.R. Grace & Co.-Conn., Caustic Soda and Sulfuric Acid Pier** (39°12'56"N., 76°34'26"W.): south side 425 feet of berthing space with dolphins; 28 feet alongside; deck height, 8 feet; receipt and shipment of 50% sodium hydroxide solution hydroxide solution and sulfuric acid; owned and operated by W.R. Grace and Co.-Conn., Grace Davison Division.

(79) **U.S. Gypsum Co., Baltimore Plant Dock** (39°13'07"N., 76°33'18"W.): south platform 740 feet with dolphins; 32 feet alongside; deck height, 11 feet; 42-inch conveyor belt; receipt of gypsum rock and aragonite sand by self-unloading vessel; owned and operated by U.S. Gypsum Co.

(80) **Facilities at Hawkins Point:**

(81) **Eastalco Aluminum Co., Hawkins Point Pier** (39°12'50"N., 76°32'22"W.): north and south sides 720 feet long; 36 to 39 feet alongside; deck height, 9 feet; 30-ton-traveling gantry crane, unloading rate 550 tons per hour; 64,000 ton aluminum storage silos; 3.64-million-gallon liquid fertilizer storage tanks; receipt of alumina, liquid fertilizer, and cement; owned by Maryland Port Administration and operated by Eastalco Aluminum Co., Transmaryland Terminal Corp., and St. Lawrence Cement CO.

(82) **Facilities at Sparrows Point:**

(83) **Bethlehem Steel Corp., Sparrows Point Plant, Ore Pier** (39°12'11"N., 76°28'55"W.): 1,153 feet long with dolphins; 47 feet alongside; deck height, 15 feet; conveyor system, three unloading towers unload 1,500 tons per hour; receipt of miscellaneous bulk materials, including pelletized ore, coke, and olivine; owned and operated by Bethlehem Corp.

(84) **Bethlehem Steel Corp., Pennwood Wharf** (39°12'40"N., 76°27'42"W.): 870 feet long; 24 feet alongside; deck height, 12 feet; two 25-ton electric bridge cranes; 50,500 square feet of covered storage; occasional shipment of steel and steel products, occasional receipt of construction materials and general cargo; owned and operated by Bethlehem Steel Corp.

(85) **Facilities at Dundalk:**

(86) **Dundalk Marine Terminal, Berths Nos. 1-13** (39°14'42"N., 76°32'20"W.): deck heights, 9 to 9.63 feet; cranes to 60-ton capacity; 240,000 square feet covered storage, 570 acres open storage; receipt and shipment of containerized and roll-on/roll-off general cargo in foreign and domestic trade; receipt and shipment of general cargo in foreign and domestic trade, receipt of molasses, automobiles; boarding passengers, mooring cruise vessels; owned by Maryland Port Administration and operated Maryland Port Administration and PM Ag Products, Inc.

(87) Berths 1-6; face, 3,830 feet long; 34 feet alongside.

(88) Berths 7-10 face; 2,825 feet long; 34 feet alongside.

(89) Berths 11-13; face 2,875 feet long; 42 feet alongside.

(90) **Facilities at Lower Canton:**

(91) **Seagirt Marine Terminal, Barge Berth** (39°15'33"N., 76°33'00"W.): face 700 feet long; 32 feet alongside; roll-on/roll-off wharf 300 feet long; 30 feet alongside; deck height, 9 feet; 27½-ton traveling container crane; 34,200 square feet of covered storage; 150 acres of open storage; receipt and

shipment of containerized and roll-on/roll-off cargo by barge; owned and operated by Maryland Port Administration.

(92) **National Gypsum Co., Baltimore Plant Wharf** (39°15'36"N., 76°33'16"W.): face 459 feet long; 32 feet alongside; deck height, 8 feet; conveyors unload 300 tons per hour; receipt of gypsum rock by self-unloading vessel; owned and operated by National Gypsum Co.

(93) **Canton Marine Terminal, Pier No. 13** (39°15'27"N., 76°33'21"W.): east side 690 feet long, 39 feet alongside; west side 1,418 feet long; 28 feet alongside; deck heights, 12 and 8 feet; 1.3 acres of open storage; receipt and shipment of roll-on/roll-off and conventional general cargo by vessel and barge; mooring vessels and barges; owned and operated by Canton Marine Terminal.

(94) **Consolidation Coal Sales Co., Pier No. 11** (39°15'29"N., 76°33'32"W.): face 1,623 feet long; 32 feet alongside; deck height, 8 feet; 102,600 square feet of covered storage; mooring floating equipment; mooring hospital ship USNS Comfort; owned by Consolidated Coal Sales Co. and operated by Sadowski Towing Co., Inc. and Consolidation Coal Sales Co.

(95) **Consolidation Coal Sales Co., Pier No. 10** (39°15'29"N., 76°33'37"W.): face 1,485 feet long; 30 to 32 feet alongside; deck height, 8 feet; mooring floating equipment; owned by Consolidated Coal Sales Co. and operated by Vane Brothers Co.

(96) **Great Lakes Dredge & Dock Co. Pier No. 6** (39°15'30"N., 76°33'42"W.): east side 1,069 feet long; 32 feet alongside; west side 927 feet long; 20 to 30 feet alongside; deck height, 8 feet; 38,100 square feet covered storage; occasional receipt and shipment of general cargo; mooring miscellaneous vessels; west side: mooring dredges and other floating equipment; owned by Consolidated Coal Sales Co. and operated by Great Lakes Dredge & Dock Co. and Consolidated Coal Sales Co.

(97) **Consolidation Coal Sales Co., Piers Nos. 4 and 5** (39°15'31"N., 76°33'46"W.): face 837 feet long; 20 to 30 feet alongside; deck height, 6 feet; 32,000 square feet covered storage; mooring coal barges; occasional receipt and shipment of general cargo; owned and operated by Consolidation Coal Sales Co.

(98) **Consolidation Coal Sales Co., Pier No. 3** (39°15'23"N., 76°33'48"W.): east side 818 feet long; west side 859 feet long; 35 feet alongside; deck height, 8 feet; 87,000 square feet of covered storage; occasional mooring of coal barges; owned and operated by Consolidation Coal Sales Co.

(99) **Consolidation Coal Sales Co., Pier No. 2:** east side 802 feet long; 27 feet alongside; west side 1,253 feet long; 42 to 50 feet alongside; deck height, 6 feet; conveyor system loads 7,000 tons per hour; shipment of coal by barge and vessel; owned and operated by Consolidation Coal Sales Co.

(100) **Facilities at Lazaretto Point:**

(101) **Rukert Terminals Corp., Lazaretto Depot, Berths A and B** (39°15'36"N., 76°34'12"W.): Berths B 575 feet long, 34 feet alongside; Berth A 525 feet long, 35 feet alongside; deck height, 9 feet; 25,000 square feet covered storage; receipt and shipment of conventional and roll-on/roll-off general cargo in foreign and domestic trade; receipt of cement; owned and operated by Rukert Terminals Corp.

(102) **Rukert Terminals Corp., Agrico Pier** (39°15'52"N., 76°34'18"W.): 450 feet of berthing space with dolphin; 30 feet alongside; deck height, 8 feet; mooring vessels; owned and operated by Rukert Terminals Corp.

(103) **Facilities at Canton:**

(104) **Rukert Terminals Corps., Pier No. 5** (39°16'01"N., 76°34'22"W.): north side 870 feet long; 36 feet alongside; deck height, 7.3 feet; 20 acres open storage area handling 40,000 tons; receipt and occasional shipment of general cargo in foreign domestic trade and of dry bulk commodities, including potash, salt, gypsum rock, and ferroalloys; owned and operated by Rukert Terminals Corp.

(105) **Clinton Street Marine Terminal Pier No. 1** (39°16'05"N., 76°34'22"W.): 223-foot face; 32 feet alongside; north and south sides 1,100 feet long, 40 to 50 feet alongside; deck height, 10 feet; 252,000 square feet covered storage; mooring harbor tugs and ships in storage; owned by Maryland Port Administration and operated by McAllister Towing of Baltimore, Inc. and Keystone Ship Berthing, Inc.

(106) **Petroleum Fuel and Terminal Co. Baltimore Barge Dock** (39°16'19"N., 76°34'19"W.): north side 453 feet long; south side 400 feet long; 25 to 27 feet alongside; deck height, 8 feet; receipt and shipment of petroleum products by barge; owned and operated by Petroleum Fuel and Terminal Co., Subsidiary of Apex Oil Co.

(107) **Petroleum Fuel and Terminal Co. Baltimore Tanker Dock** (39°16'23"N., 76°34'20"W.): 260 feet of berthing space with dolphins, 40 feet alongside; deck height, 5 feet; receipt and occasional shipment of petroleum products by vessel and barge; owned and operated by Petroleum Fuel and Terminal Co., Subsidiary of Apex Oil Co.

(108) **Facilities on Northwest Harbor:**

(109) **Broadway Recreation Pier** (39°16'49"N., 76°35'32"W.): face 150 feet of berthing space, 25 feet alongside; sides 500 feet of berthing space; 16 to 25 feet alongside; deck height, 4 to 5 feet; mooring harbor tugs; owned by City of Baltimore and operated by Moran Towing of Maryland, Inc..

(110) **Supplies.**—Marine supplies of all kinds are available in the Port of Baltimore. All grades of heavy marine bunker fuel, lubricants, and diesel oil can be obtained. Vessels may bunker directly at marine oil terminals or may be serviced by barge at anchor. Most of the piers and wharves described have water and shore power connections. Water can also be delivered by waterboat anywhere in the harbor.

(111) **Repairs.**—Baltimore is well equipped to make major repairs to large vessels. The largest graving dock in the area is at Bethlehem Steel Sparrows Point yard; it is 1,200 feet long, 198 feet wide, and has a depth of 23 feet over the blocks. The largest floating drydock in the area is at Bethlehem Steel Sparrows Point yard; it has a lifting capacity of 44,000 tons, is 882 feet long and 135 feet wide, and has 25 feet of water over the blocks.

(112) Marine railways can haul out vessels up to 125 feet and up to 300 tons.

(113) Shafts of any size required can be produced in the port. Several smaller repair facilities along the tributaries cater to yachtsmen and small-boat operators.

(114) Baltimore has extensive facilities for wrecking and salvage. In addition to equipment especially designed for salvage operations, there are heavy hoisting facilities which, though primarily designed for private industrial purposes, are available in case of need.

(115) **Communications.**—Nearly all the piers and wharves in Baltimore Harbor are near the center of the city, and all are connected to it by wide paved streets. Most of the piers and wharves have direct connections with mainline railroads whose tracks are connected with all parts of the port area.

(116) The Port of Baltimore is served by the Consolidated Rail Corporation (ConRail), the Chesapeake and Ohio Railway (Chessie System), CSX Transportation, Inc., and the Western Maryland Railway. The Canton Railroad is a terminal line that operates about 35 miles of track in the port area and connects with the major railroads.

(117) More than 100 steamship companies connect Baltimore with principal U.S. and foreign ports by regular sailings in the overseas, coastwise, and intercoastal trades. About 150 motor truck carriers service the port.

(118) Several major airlines provide frequent scheduled services between **Baltimore-Washington International Airport**, inland about 7 miles southwestward of Fort McHenry, and domestic and overseas points.

(119) The Maryland Port Administration radiotelegraph station **WMH** provides ship-to-shore communications on a 24-hour basis on 428, 500, 6519.5, 8686, and 12952.5 kHz. This station reports local harbor information to shipping.

(120) The **Baltimore Maritime Exchange**, on the Baltimore Recreation Pier, provides, to its members, information concerning ship movements, local harbor conditions, weather data, and various other services; the exchange operates on VHF-FM channel 11 from 0400 to 1900, call sign KXR-71. Members are requested to contact the Association of Maryland Pilots on VHF-FM channels 11, 13 or 16 at other than the previously mentioned times; call sign WOT.

(121) **Sparrows Point**, on the northeast side of Patapsco River 3 miles above the mouth, is the site of the Bethlehem Steel Corp. steel and shipbuilding plants. The two marked channels on the south side of Sparrows Point lead from the main channel in Baltimore Harbor to the ore-handling wharves; the easterly channel (chart 12278) had a controlling depth of 23 feet in 1983. In January 1989, the westerly channel had a midchannel controlling depth of 34 feet.

(122) The marked channel on the west side of Sparrows Point, in January-February 1995, had a controlling depth of 25 feet and leads to the shipyard facilities; a marked branch coal pier channel in 1986-September 1987, had a midchannel controlling depth of 18 feet.

(123) **Bear Creek**, on the northeast side of Patapsco River 4 miles above the mouth, has channel depths of 8 feet or more almost to the head, 3.5 miles above the mouth. Rocks, covered 2 feet and marked by a daybeacon, are about 550 yards southeast of Sollers Point in about 39°13'10"N., 76°31'01"W. Numerous piles and obstructions are in the entrance to the creek between Coffin Point and Lloyd Point. An overhead power cable 1 mile above the mouth has a clearance of 95 feet between the lighted structures, and 62 feet elsewhere. A fixed highway bridge with a clearance of 55 feet crosses Bear Creek from the northern side of **Coffin Point** to the opposite shore.

(124) **Peachorchard Cove**, on the west side of Bear Creek about 0.8 mile above the entrance, has depths of 7 feet for 0.4 mile to within 0.1 mile of its head.

(125) A highway bridge 0.5 mile up Bear Creek has a bascule span with a clearance of 25 feet. (See **117.1 through 117.59 and 117.543**, chapter 2, for drawbridge regulations.) The railroad bridge 0.9 mile above the fixed bridge has a swing span with a clearance of 8 feet. (See **117.1 through 117.49**, chapter 2, for drawbridge regulations.)

(126) **Lynch Cove**, on the northwest side of Bear Creek 1 mile above the fixed bridge, has general midchannel depths of 8 feet or more for about 0.6 mile, thence shoaling to 1 foot to the head 0.8 mile above the entrance.

(127) There are several small-craft facilities in Lynch Cove.

(128) **Schoolhouse Cove**, 1.6 miles above the fixed bridge, has depths of 7 feet to near the head. A small boatyard in the cove can haul out boats up to 45 feet for hull and engine repairs. A yacht club is on the east side of Bear Creek just below Schoolhouse Cove.

(129) The highway bridge over Bear Creek just above Schoolhouse Cove, has a bascule span with a clearance of 12 feet. (See **117.1 through 117.59 and 117.543**, chapter 2, for drawbridge regulations.)

(130) A 6 m.p.h. **speed limit** is enforced in Bear Creek above Lynch Cove on Saturdays, Sundays, and holidays.

(131) **Fort Carroll** is a stone-and-concrete structure on the northeast side of Patapsco River main channel 4.4 miles above the mouth. The white tower of the abandoned lighthouse is on the west front of the fort.

(132) **Hawkins Point**, on the southwest side of Patapsco River 4.5 miles above the mouth, is at the southeastern limits of Baltimore. There are many obstructions surrounding the point. A privately dredged and marked 33-foot channel leads to a 720-foot-long cargo pier with rail and truck connections 0.4 mile northwestward of the point.

(133) The **Francis Scott Key Bridge**, a fixed highway bridge with a clearance of 185 feet, crosses the Patapsco River between Hawkins Point and Sollers Point.

(134) **Curtis Bay**, on the southwest side of Patapsco River 6 miles above the mouth, is the approach to large coal and oil wharves and to several plants. The entrance is between Leading Point and Fishing Point, 0.8 mile to the northwestward. The federal project depth in Curtis Bay Channel is 50 feet. (See Notices to Mariners and latest editions of charts for controlling depths.)

(135) A privately dredged channel leads to the gypsum pier with mooring dolphins and conveyor belt 0.2 mile west of Leading Point. In 1983, a controlling depth of 24 feet was in the channel.

(136) The petroleum terminals on **Fishing Point**, the ore pier on the southwest side of **Stonehouse Cove**, the coal pier at the head of Curtis Bay, and the other deep-draft facilities in Curtis Bay were described earlier in this chapter under Wharves, Baltimore Harbor.

(137) **Curtis Creek** empties into the head of Curtis Bay from southward between **Sledds Point** and **Ferry Point**, 0.3 mile to the southwestward. The creek is buoyed at critical points. In August 1999-February 2000, 17 feet could be carried at midchannel to Arundel Cove.

(138) **Cabin Branch**, on the west side of Curtis Creek just south of Ferry Point, has depths of 17 feet or more to within 0.1 mile of a fixed bridge 0.4 mile above the entrance. The industrial wharves on the north side of the branch have reported depths of 12 to 28 feet at their faces.

(139) Several of the wharves on either side of Curtis Creek between the entrance and Pennington Avenue bridge have depths of 25 to 35 feet at their faces.

(140) A shipyard on the west side of Curtis Creek just north of the new Pennington Avenue bridge has a marine railway that can handle vessels up to 125 feet for hull and engine repairs; cranes to 65 tons are available.

(141) Above its entrance, Curtis Creek is crossed by the following bascule highway bridges: at Mile 0.85, the Pennington Avenue bridge, clearance 40 feet; at Mile 0.86, the Route 695 bridge, clearance 58 feet. At Mile 1.3, a railroad bridge has a swing span with a clearance of 13 feet. (See **117.1 through 117.59 and 117.557**, chapter 2, for drawbridge regulations.)

(142) **Arundel Cove** is on the east side of Curtis Creek 1.6 miles above the entrance. The Coast Guard yard is on the north side of the cove. A highway bridge 0.4 mile above the entrance to the cove has a 28-foot fixed span with a clearance of 6 feet.

(143) A depth of 13 feet can be carried up Curtis Creek from Arundel Cove to the forks 2.3 miles above the entrance. **Furnace Creek**, the west fork, in August 1976, had reported depths of 11 feet or more for 0.8 mile, then shoals gradually to 4 feet at the fixed highway bridge 0.4 mile farther up; the bridge has a clearance of 8 feet. Overhead power cables about 0.1 mile above the bridge have a least clearance of 56 feet. **Marley Creek**, the middle fork, in 1997 had a reported controlling depth of 5 feet for 1.6 miles, thence 3½ feet to the fixed bridge about 0.4 mile farther up; the bridge has a clearance of 9 feet. Overhead power cables crossing Marley Creek have a least clearance of 32 feet.

(144) A marine service pier on the west side of Marley Creek 1.3 miles above the forks has depths of 12 feet at the face. Gasoline and water are available. A marine railway can handle boats up to 50 feet for hull and engine repairs.

(145) The **Fairfield** section of Baltimore begins 6.5 miles above the mouth of Patapsco River and extends upriver along the southwest side for more than 1 mile. Most of the piers and wharves handle paper, petroleum products, sulfur, chemicals, fertilizers, scrap metal, and lumber; depths range from 18 to 30 feet at most of the facilities, but depths of 25 to 34 feet are at the petroleum terminals at the southerly end of the section. The deep-draft facilities at Fairfield were described earlier in this chapter under Wharves, Baltimore Harbor.

(146) **Dundalk Marine Terminal**, on the east side of Patapsco River 6.5 miles above the mouth, has two marked entrance channels. **Dundalk East Channel**, marked by buoys and a private **033°** lighted range, had a controlling depth of 40 feet in March 1999. **Dundalk West Channel**, marked by buoys and a private **030°** lighted range, had a controlling depth of 39 feet in March 1999. Several cranes have been lost overboard and some ships have parted their lines while berthed at Dundalk Marine Terminal during extreme wind conditions. Mariners should contact Maryland Port Administration for details about safety requirements. The facilities at the terminal were described earlier in this chapter under Wharves, Baltimore Harbor.

(147) **Colgate Creek**, just north of the Dundalk facility, has a controlling depth of 2 feet. A depth of about 24 feet can be carried to the Western Electric Co. Wharf by using Dundalk West Channel.

(148) The fixed highway bridge 0.3 mile above the entrance has a clearance of 8 feet. The railroad bridge 0.8 mile above the entrance has a swing span with a width of 30 feet and a clearance of 5 feet; the swing span is inoperative and remains in a closed position. Overhead power cables crossing the creek have a least clearance of 28 feet.

(149) The **Lower Canton** section of Baltimore begins on the north side of Patapsco River 7.5 miles above the mouth and extends westward to **Lazaretto Point**. Dredged and buoyed channels lead to the principal piers which handle general cargo, grain, ore, and chemicals; depths of 20 to 41 feet are at the berths. The

deep-draft facilities in this section were described earlier in this chapter under Wharves, Baltimore Harbor.

(150) Patapsco River turns sharply westward at the intersection of Ferry Bar Channel and main Fort McHenry Channel 7.8 miles above the mouth. About 0.7 mile wide between **Fort McHenry** on the north and Fairfield on the south, the river narrows to a width of 150 yards 10 miles above the mouth and meanders off to the southwestward while the deeper channel continues westward into **Middle Branch**.

(151) **Ferry Bar** is a point on the north side of Ferry Bar Channel 1.5 miles westward of Fort McHenry.

(152) Ferry Bar Channel (East Section) is marked by lighted buoys and has a project depth of 42 feet. (See Notice to Mariners and latest editions of the charts for controlling depths.)

(153) A marked channel leads from the west end of Ferry Bar Channel to the Hanover Street bascule bridge. In January 1989, the reported controlling depth was 4 feet.

(154) The Western Maryland Railway **Port Covington** section of Baltimore begins 0.8 mile west of Fort Henry and extends west and southwestward to Ferry Bar. The approach is 1.2 miles westward along Ferry Bar Channel.

(155) The deep-draft facilities in this section were described earlier in this chapter under Wharves, Baltimore Harbor.

(156) Depths of about 5 to 8 feet are at the outer ends of piers at the boatyards northwestward of Ferry Bar. Hull and engine repairs can be made. The largest marine railway can handle boats up to 60 feet; largest mobile lift, 20 tons. Gasoline, diesel fuel, slips, and some marine supplies are available.

(157) The Hanover Street bridge over Middle Branch 0.3 mile above Ferry Bar has a bascule span with a clearance of 38 feet at the center, and 23 feet for a central width of 150 feet. The Western Maryland Railway bridge, 1 mile above Ferry Bar, has a swing span with a clearance of 9 feet. (See **117.1 through 117.59 and 117.541**, chapter 2, for drawbridge regulations.)

(158) Most of the marine facilities in Middle Branch are used by small vessels and barges for delivery of petroleum and coal for local consumption.

(159) **Northwest Harbor**, the northerly branch of Patapsco River, is entered between Fort McHenry and Lazaretto Point, 8.2 miles above the mouth of Patapsco River. East Channel, a dredged channel with a project depth of 49 feet, extends north from the entrance for about 0.7 mile to a turning basin. West Channel, with a project depth of 40 feet, branches northwest from East Channel for about 0.8 mile to a turning basin. (See Notice to Mariners and latest editions of the charts for controlling depths.) Above the West Channel turning basin, depths of about 25 to 21 feet can be carried to the head of Northwest Harbor at Inner Harbor.

(160) **Fort McHenry Tunnel**, a vehicular tunnel, crosses under the entrance to Northwest Harbor, extending from Lazaretto Point to a point about 0.2 mile westward of Fort McHenry.

(161) The CSX Transportation, Inc. **Locust Point** section is on the southwest side between Fort McHenry and Locust Point. Most of the piers handle general cargo, but some also handle bulk; depths alongside are 30 to 35 feet. The grain elevator at pier 7 has a capacity of nearly 4 million bushels and can load 150,000 bushels per hour.

(162) The piers and wharves on the east and north sides of Northwest Harbor handle general cargo, coal, petroleum products, chemicals, and fertilizers; depths alongside the principal facilities are 30 to 35 feet, and at the others, 15 to 25 feet. The

deep-draft facilities in this section were described earlier in this chapter under Wharves, Baltimore Harbor.

(163) The ship repair facilities in Northwest Harbor can handle large ocean-going vessels. The graving dock on the southwest side of the harbor 0.4 mile above Fort McHenry is 460 feet long, 58 feet wide at the bottom, with a water depth of 18 feet. A ship-building basin, 1,200 feet long and 198 feet wide, is on the west side of Sparrows Point.

(164) **Inner Harbor**, at the head of Northwest Harbor, has a marina on the south side with depths of 12 feet or more at the slips. Berths, electricity, gasoline, diesel fuel and some marine supplies are available.

(165) A 6-knot **speed limit** is enforced in Inner Harbor.

(166) **Chart 12278.—Swan Point** (39°08'41"N., 76°16'44"W.), on the east side of Chesapeake Bay opposite Patapsco River entrance, has been mentioned in chapter 14.

(167) **Tolchester Beach**, on the east side of Chesapeake Bay 4.5 miles north-northeast of Swan Point, has a privately dredged entrance channel and basin. In September 1980, the reported controlling depth was 6 feet in the channel; depths of 4 to 6 feet were reported in the basin. Gasoline, diesel fuel, marine supplies, and limited berths are available. A 50-ton mobile lift is available for repairs.

(168) **Fairlee Creek**, on the east side of Chesapeake Bay 8.5 miles north-northeastward of Swan Point, has a narrow entrance between a jetty on the east and a long, low hook on the west. The privately buoyed entrance has depths of about 6 feet. In 1978, a submerged obstruction was reported in the entrance channel in about 39°16'11"N., 76°12'33"W. In September 1981, a submerged obstruction was reported inside the creek in about 39°15'42"N., 76°12'20"W. A marina with berthing facilities is on the east side of the creek just inside the entrance; gasoline, diesel fuel, and some marine supplies are available. A 50-ton mobile lift is available for hull and engine repairs.

(169) **Worton Point** (39°19'10"N., 76°11'14"W.) is on the east side of Chesapeake Bay 152.5 miles above the Virginia Capes.

(170) About 1.5 miles southward of Worton Point is **Worton Creek**, which has depths of 10 to 12 feet in the broad bight at the entrance and 7 feet inside for 1.4 miles. Good anchorage, protected from easterly winds, is available in depths of 11 to 12 feet just inside the entrance. A good, well-protected anchorage in depths of 6 to 9 feet is also reported in the creek below Buck Neck Landing. The critical part of the channel, 0.5 mile above the entrance, is marked by buoys. A submerged obstruction is reported about 50 yards north-northwestward of entrance Buoy 3; caution is advised.

(171) A marina at **Green Point Wharf**, on the east side of Worton Creek about 1.1 miles above the mouth, has gasoline, berths, and some marine supplies. The marina at **Buck Neck Landing**, on the east side of the creek 1.4 miles above the entrance, has gasoline, diesel fuel, and berthing facilities; marine supplies are available. Haul-out capacities for repairs are: railway, 60 feet; lift, 15 tons. The public bulkhead adjoining the fuel pier has depths of about 6 feet alongside.

(172) **Pooles Island**, 10 miles northeastward of Baltimore Harbor entrance, is a portion of the Aberdeen Proving Ground complex constituting prohibited land areas and dangerous contiguous water areas. Landing is prohibited to all personnel and boats, primarily because of the presence of hazardous unexploded ordnance and because such landings violate Federal Regulations.

(See **334.140**, chapter 2, for limits and regulations of the **restricted area**.)

(173) Pooles Island has an abandoned lighthouse on the west side near the north end. On the island are the white skeleton towers of two lighted ranges, the rear tower common to both. The north range marks a reach of the main channel leading to the Chesapeake and Delaware Canal. The south range marks a passage across the middle ground east of the island. It is stressed that Pooles Island is a prohibited land area entirely within the Aberdeen Proving Ground complex and is covered with hazardous unexploded ordnance.

(174) In 1969, shoaling was reported 1.2 miles east of the southern end of Pooles Island in about 39°16'26"N., 76°14'48"W.

(175) **Local magnetic disturbance**.—Differences of as much as 5° from the normal variation have been observed in the channel from Pooles Island to Howell Point (chart 12274).

(176) **Pooles Island Bar Light** (39°15.7'N., 76°16.7'W.), 27 feet above the water, is shown from a black skeleton tower on a cylinder base, in depths of 15 feet 0.8 mile south-southwestward of the island; the light is 147.1 miles above the Virginia Capes.

(177) A buoyed lane extends southwestward between fishtrap areas from eastward of Pooles Island to the Baltimore channel 1 mile southward of North Point. Mariners are cautioned that the southwest end of the lane runs over a discontinued spoil area. The lane, with depths of about 10 to 14 feet in July-August 1994, is entered on the Pooles Island south range, bearing **264°**; Pooles Island Bar Light is on the northwest side of the lane.

(178) The approach to the rivers between North Point (39°11'42"N., 76°26'38"W.) and Pooles Island is through a buoyed side lane southwestward of Pooles Island Bar Light.

(179) **Hawk Cove**, 5 miles north-northeastward of North Point, has depths of 8 to 11 feet and is a good anchorage.

(180) A shallow passage, 3 miles northeast of North Point, leads to Hawk Cove. In September-December 1995, the reported controlling depth was 3½ feet (5 feet at midchannel). The channel is marked by lights and daybeacons.

(181) **Back River**, which flows into the southwest end of Hawk Cove, has depths of 7 to 4 feet for 6 miles to a fixed highway bridge with a clearance of 16 feet; overhead power cables above and below the bridge have a clearance of 34 feet. Even the smallest boats seldom go above the bridge. The channel, marked by private buoys and daybeacons, is clear except for a 4-foot middle ground about halfway between Hawk Cove and the bridge.

(182) There are small-craft facilities on both sides of Back River. (See the small-craft facilities tabulation on chart 12279 for services and supplies available.)

(183) **Charts 12278, 12274, 12273.—Middle River**, 6.5 miles north-northeastward of North Point, is entered through a marked dredged channel which leads to an anchorage basin at the Martin Marietta Company plant at the head of **Dark Head Creek**, the east fork of the river 3.2 miles above the mouth. In June 1999, the controlling depth was 6.7 feet (9.4 feet at midchannel) to the anchorage basin, thence 9.4 feet in the basin with lesser depths along the sides. The west fork of Middle River has depths of 7 feet to within 0.5 mile of a fixed bridge near the head.

(184) A 6 m.p.h. **speed limit** is enforced on Saturdays, Sundays and holidays.

(185) **Sue Creek**, on the south side of the entrance to Middle River, has depths of about 7 feet to the yacht club just inside the

entrance, thence depths of 5 to 3 feet for 1 mile inside. The entrance is marked by a light.

(186) **Galloway Creek**, a broad cove on the north side of Middle River just inside the entrance, has depths of 8 to 5 feet except along the shoreline.

(187) **Frog Mortar Creek**, on the northeast side of Middle River 1.5 miles above the mouth, has depths of 6 to 8 feet. A 12-foot marked channel leads from Middle River to the Martin Marietta seaplane basin on the west side of the creek 0.5 mile above the entrance. A 6 m.p.h. **speed limit** is enforced on Saturdays, Sundays and holidays.

(188) **Warning**.—Small-craft operators in Frog Mortar Creek are advised to use caution in the vicinity of Martin State Airport. Small-craft with masts exceeding 37 feet in height above the waterline create an obstruction to low-flying aircraft. Operators of such vessels transiting Frog Mortar Creek should contact Martin State Airport Control Tower on VHF-FM channel 16 when visibility is less than 1.0 statute mile so approaching aircraft can be warned. Tower operations are from 0600 to 2200 daily.

(189) **Hopkins Creek**, on the southwest side of Middle River 2.6 miles above the mouth, has depths of 8 to 5 feet.

(190) Numerous small-craft facilities are at the upper end of Middle River and in most of the tributaries.

(191) **Seneca Creek**, 8 miles north-northeastward of North Point, has depths of 8 feet in the entrance and 5 to 6 feet into the several arms. A light marks the outer end of the shoal on the east side of the entrance. Gasoline, slips, and some marine supplies can be obtained at several marinas along the creek. Lifts to 25 tons are available for hull and engine repairs.

(192) **Gunpowder River**, 9 miles northeastward of North Point, is entered through a channel marked by a light and buoys westward of **Spry Island Shoal**, in midentrance; the shoal is reported covered 2 to 4 feet and should be avoided. In August 1998, the river channel had reported depths of 8 feet for 2 miles, thence 2 to 9 feet for 4 miles, thence 3 feet in a privately dredged channel leading to an unnamed creek below **Joppatowne** with depths of 4 to 7 feet, thence 4 feet in the marina basin at Joppatowne.

(193) The fixed railroad bridge 6.3 miles above the mouth has a 19-foot channel span with a clearance of 11 feet. An overhead power cable at the bridge has a clearance of 37 feet.

(194) Marinas above the bridge have slips, gasoline, and some marine supplies. A 15-ton mobile hoist is available for hauling out boats for hull and engine repairs.

(195) Spry Island Shoal and most of Gunpowder River are within the **Aberdeen Proving Ground** complex, a **restricted area**, shown on charts 12273, 12274, and 12260. (See **334.140**, chapter 2, for limits and regulations.) The area is marked by private seasonal buoys.

(196) Some waters of the Aberdeen Proving Ground are closed to the public at all times. Others have a limited access during specified hours. (See **334.140**, chapter 2, for limits and regulations.)

(197) It is stressed that opening these restricted and dangerous waters to navigation in the Aberdeen Proving Ground complex does not include the privilege of landing personnel or boats on any of the Government property. All these land areas constitute an extremely hazardous risk due to the presence of unexploded ordnance. Any landings constitute punishable Federal offenses.

(198) Additional information on this subject is contained in the pamphlet "Boater's Guide to Restricted Water Zone," published

by the Aberdeen Proving Ground. This pamphlet is available at most local marinas in the area.

(199) **Chart 12274.—Bush River** is on the northwest side of Chesapeake Bay 152 miles above the Virginia Capes. The lower 5 miles of the river are within the Aberdeen Proving Ground complex constituting prohibited land areas and restricted and dangerous water areas.

(200) The river has minimum depths of 7 feet to the railroad bridge 6.3 miles above the mouth, thence 5 to 6 feet for another 1.5 miles. The approach to the river and the channel inside are marked by buoys and a light as far as **Tapler Point**, on the west side 3.5 miles above the mouth, and by a light, on the east side 0.3 mile southward of the railroad bascule bridge, which shows a high-intensity beam down river; the lower light, off the western shore about 2.7 miles above the mouth, shows high-intensity beams up and down river. The mean range of tide is 1.4 feet.

(201) The railroad bridge 6.3 miles above the mouth of Bush River has a 35-foot bascule span with a clearance of 12 feet. (See **117.1 through 117.59 and 117.547**, chapter 2, for drawbridge regulations.) The power cable at the bridge has a clearance of 35 feet. A high-voltage power cable about 200 yards below the bridge has a clearance of 43 feet and is supported by towers on either bank and a tower near midriver; a privately maintained light is shown from the southeast leg of the middle tower.

(202) **Otter Point Creek**, on the west side of Bush River 0.5 mile above the railroad bridge, has depths of 3 feet for 1 mile above the entrance. An overhead power cable with a clearance of 48 feet crosses the creek.

(203) Marinas in Otter Point Creek and on the eastern shore of the Bush River just above the bridge have slips, gasoline, and some marine supplies. Hull and engine repairs can be made; the largest haul-out capacities are: railway, 45 feet; lift, 12 tons.

(204) **Still Pond** (39°20'25"N., 76°08'30"W.), a bight on the southeast side of Chesapeake Bay 154.7 miles above the Virginia Capes, has general depths of 9 to 11 feet and is a good anchorage for small craft during easterly winds. **Churn Creek**, which empties into the southwest corner of the bight, has depths of 2 feet in the very narrow entrance and deeper water inside.

(205) **Stillpond Creek**, at the southeast corner of the bight, is entered through a narrow privately dredged channel. In April 1988, the reported controlling depth was 7½ feet through the entrance channel. A light and buoys mark the entrance channel. The channel inside Stillpond Creek is marked by a daybeacon and buoys. Stillpond Creek entrance channel is subject to frequent shoaling; local knowledge is advised.

(206) **Stillpond Coast Guard Station** is on the north side of the entrance to Stillpond Creek.

(207) **Sassafras River** joins Chesapeake Bay from eastward 159 miles above the Virginia Capes. The entrance is between **Howell Point**, marked by a light, and **Grove Point**, 3.5 miles east-northeastward; the entrance width normal to the channel is about 1 mile. The river is used by vessels drawing up to 12 feet, but the usual draft is 6 feet or less.

(208) The river channel has depths of 13 feet, or more to a point 1 mile above the U.S. Route 213 bascule bridge, thence 7 to 3 feet for another 2 miles. The channel is broad and straight for the first 4 miles, then is narrow and crooked in places, but is marked as far as the highway bridge 10 miles above the mouth. The mean range of tide is 1.6 at Betterton and 2 feet at Georgetown.

(209) **Betterton** is a village on the south side of Sassafras River 2 miles eastward of Howell Point. The principal wharf has depths of 9 feet at the outer end. Excursion boats from Baltimore call at the wharf during the summer. Gasoline and some supplies are available in the summer.

(210) **Turner Creek**, on the south side of Sassafras River 4.5 miles above the mouth, has depths of at least 7 feet in the very narrow entrance and 5 feet for 0.6 mile upstream. The entrance is marked by a seasonal buoy. The creek has several small landings along its shores and is much traveled by local pleasure boats.

(211) **Kentmore Park** is a small community on the south side of Sassafras River 5 miles above the mouth. The community wharf has depths of 7 feet at the upper end.

(212) **Fredericktown**, on the north side, and **Georgetown**, on the south side of Sassafras River 10 miles above the mouth, are connected by a highway bridge that has a 40-foot bascule span with a clearance of 5 feet. The bridgetender monitors VHF-FM channel 16 and works on channels 13 and 68; call sign KYU-699. (See **117.1 through 117.59 and 117.570**, chapter 2, for draw-bridge regulations.) Many yachts and pleasure craft harbor here. The **speed limit** is 6 miles per hour in Sassafras River in an area extending about 0.5 mile above and 0.5 mile below the highway bridge.

(213) There are numerous small-craft facilities on both sides of the river just below the bridge. Berthing, electricity, water, gasoline, diesel fuel, and marine supplies can be obtained at these marinas. Mobile lifts are available to 45-tons for hull and engine repairs.

(214) The unmarked channel in Sassafras River above the bridge is narrow in places and difficult to follow without local knowledge. A marina on the south side of the river 1 mile above the bridge has gasoline and some supplies; an 18-ton lift can haul out boats for hull and engine repairs.

(215) **Spesutie Narrows** (39°25.2'N., 76°05.7'W.), on the northwest side of Chesapeake Bay 159 miles above the Virginia Capes, is between the mainland and **Spesutie Island**, close to the eastward. A privately dredged channel leads from the flats off the southern entrance into and along the narrows to a basin at the Army landings at Mulberry Point. In July 1982, the controlling depth was 5 feet to the basin with 2½ to 5 feet at the landings. The entrance channel is marked by buoys and privately maintained lighted ranges, and the inner channel is marked by daybeacons.

(216) The upper end of the narrows is closed by a solid-fill causeway.

(217) Spesutie Island and Spesutie Narrows are within the Aberdeen Proving Ground complex constituting prohibited land areas and restricted and dangerous contiguous water areas.

(218) **Elk River**, on the east side of Chesapeake Bay 162 miles above the Virginia Capes, is the approach to the Chesapeake and Delaware Canal, which is described in chapter 7. The entrance to the river is between **Grove Point** and **Turkey Point**, 3 miles north-northeastward; the latter point is a thinly wooded bluff with abrupt slopes at the south end. The entrance width normal to the channel is about 1 mile.

(219) **Mariners are required to observe the Federal speed regulation when navigating throughout Elk River, Back Creek, and Chesapeake and Delaware Canal.** (See **Navigation Regulation § 162.40(b)**, chapter 7, for the regulated speed limit and other warnings.)

(220) A **special anchorage** is on the east side of Turkey Point in **Jacobs Nose Cove**. (See **110.1 and 110.71**, chapter 2, for limits and regulations.)

(221) The mean range of tide is 2.1 feet at the entrance to Elk River and 2.3 feet at the head. The current velocity is 0.8 knot.

(222) **Local magnetic disturbance.**—Differences of 3° to 8° from normal variation have been observed in Elk River channel from Grove Point to Courthouse Point.

(223) **Bohemia River**, on the east side of Elk River 5 miles above the mouth, has depths of 7 feet or more for 4 miles to the junction of **Great Bohemia Creek** and **Little Bohemia Creek**, thence 6 to 4 feet for 1.5 miles in Great Bohemia Creek and 7 feet for 1 mile in Little Bohemia Creek. The channel is broad and easy to follow for 2 miles above the entrance, then becomes very narrow and crooked. In August 1980, shoaling to an unknown extent was reported in the entrance to the Bohemia River in about 39°28'45"N., 75°56'13"W.

(224) The cove on the southwest side of Bohemia River 3 miles above the entrance has depths of 3 to 5 feet and is much used as a small-boat anchorage.

(225) A highway bridge 4.0 miles above the mouth at Bohemia River has a 40-foot fixed span with a clearance of 30 feet. The **speed limit** is 6 miles per hour from the highway bridge to a point about 1 mile downstream in Bohemia River.

(226) There are several small-craft facilities along the north side of Bohemia River, about 1.5 miles above the entrance, and along the south side of the river below the bridge.

(227) **Old Town Point Wharf**, on the southeast side of Elk River 7 miles above the mouth, has depths of 10 feet at the outer end. This is a Government wharf and a vessel identification and monitoring station for the west end of the Chesapeake and Delaware Canal.

(228) **Back Creek**, on the east side of Elk River 9 miles above the mouth and 171.4 miles above the Virginia Capes, is the route of the Chesapeake and Delaware Canal and has been described in chapter 7.

(229) Above Back Creek, the natural channel in Elk River is marked by private buoys to just above **Locust Point** (39°33'54"N., 75°50'56"W.). Depths in the narrow crooked channel vary considerably, ranging from about 10 feet at the south end to about 1 foot off Locust Point; the chart is a guide. In 1978, a depth of 1 foot was reported to be available in the winding channel above Locust Point. For a distance of about 0.4 mile northward of Locust Point and about 0.2 mile southward of **Whitehall Point**, the channel is reported to be marked by private stakes. Mariners bound for Elkton are advised to seek local knowledge when transiting the channel.

(230) Small-craft facilities are on both sides of Elk River 5 miles above Old Town Point Wharf.

(231) **Big Elk Creek**, on the east, and **Little Elk Creek**, on the west, have depths of 3 feet to the fixed highway bridges 0.6 and 0.4 mile above their respective mouths. The channels in each are narrow and crooked with numerous snags and shoals that are unmarked. Extreme caution is advised beyond the junction. **Elkton**, between the creeks and 16 miles above the mouth of Elk River, is on the main line of the Penn Central Railroad and has several industrial plants.

(232) The natural channel of Chesapeake Bay turns northward off the mouth of Elk River and splits into two branches between Turkey Point and Spesutie Island, 2.3 miles to the westward. One branch rounds Spesutie Island and continues northward to

Susquehanna River; the other hugs the west side of Turkey Point and high thickly wooded, and continues to Northeast River. The flats between the two branches are very shallow, and large areas bare at low water.

(233) **Fishing Battery Light** (39°29.7'N., 76°05.0'W.), 38 feet above the water, is shown from a black skeleton tower on the battery on the east side of the channel leading to Susquehanna River; the light is 167.1 miles above the Virginia Capes. Near the light are a house and a few trees. A shallow channel leads from the main channel to a basin on the west side of the light.

(234) **Swan Creek**, on the western shore of Chesapeake Bay opposite Fishing Battery Light, has depths of 4 feet in the entrance and 3 to 10 feet inside for about 2 miles. The creek is little used except by boats of the U.S. Army. An overhead power cable with a clearance of 32 feet crosses the northern part of the creek.

(235) **Susquehanna River** empties into the head of Chesapeake Bay from northwestward 170.1 miles above the Virginia Capes. The entrance is between **Concord Point** and **Perry Point**, 1 mile east-northeastward. A marked dredged channel leads through the flats from deep water in Chesapeake Bay to Havre de Grace. A side channel leads to a basin at City Park at Havre de Grace. In February 1990, the controlling depth was 12 feet to the mouth of Susquehanna River at Havre de Grace. In 1990-February 1998, a controlling depth of 2 feet (5½ feet at midchannel) was in the side channel and 4½ feet in the basin at City Park. The mean range of tide is 1.8 feet at Havre de Grace and 2.1 feet at Port Deposit. It is reported that the river is usually closed by ice for a few weeks during the winter, but ice gorges and freshets are infrequent because of the dams upstream.

(236) A **seaplane landing area** is in the middle of the entrance to Susquehanna River; mariners are advised to use caution.

(237) **Havre de Grace**, on the west side of the entrance to the Susquehanna River, is on the main lines of Amtrak and the CSX Transportation, Inc. The town has little waterborne commerce, but many pleasure craft base here; most of the wharves are in poor condition. The oil wharf just above the first bridge has depths of about 13 feet alongside.

(238) A rock covered 6 feet and marked by buoys on the east, west, and south sides, is about 200 yards off the Havre de Grace wharves and 500 yards below the drawspan of the first bridge. There are said to be several other rocks between this rock and the wharves that require local knowledge to avoid. In 1967, a sunken rock was reported just north of the first bridge in 39°33'20"N., 76°04'58"W., about 200 yards east-northeastward of the charted rock.

(239) The railroad bridge 0.8 mile above the mouth has a swing span with a clearance of 52 feet. (See **117.1 through 117.59 and 117.575**, chapter 2, for drawbridge regulations.) The overhead power cable on the lower side of the bridge has a clearance of 127 feet. Stone piers of a former highway bridge, just below the rail-

road bridge, stand 15 feet above high water. The remaining three fixed bridges between Havre de Grace and Port Deposit have minimum clearance of 86 feet.

(240) There are berthing and repair facilities for small craft at Havre de Grace. One of the basins is protected by old railroad barges sunk in place.

(241) **Perryville**, on the opposite side of the river from Havre de Grace, has berthing facilities for small craft above the first bridge. Gasoline and some marine supplies are available; largest lift for hauling out boats is 13 tons.

(242) Above Havre de Grace, depths of 13 feet to 50 feet are in the channel of Susquehanna River to Port Deposit, on the northeast side 4 miles above the mouth; the river is obstructed by rocks above this point. In 1977, rocks were reported in about 39°35.8'N., 76°07.2'W., about 3.6 miles above the mouth.

(243) **Garrett Island**, 0.8 mile long and 0.4 mile broad, high and wooded, is in midriver 1 mile above the mouth. The favored channel is west of the island, however, mariners are advised to use caution because of the numerous rocks, shoals, logs, and submerged pilings in this area.

(244) **Port Deposit** has a large manufacturing company that builds barges, derricks, and boats. The marinas at the south end of the town have berthing and engine repair facilities; largest lift, 12 tons. Gasoline and some supplies are available.

(245) **Conowingo Dam** is about 10 miles above the mouth of the Susquehanna River.

(246) **North East River** empties into the head of Chesapeake Bay 4.5 miles eastward of Susquehanna River and 169.1 miles above the Virginia Capes. The entrance is between **Red Point**, which is 5 miles north-northeastward of Turkey Point, and **Carpenter Point**, on the west. The commercial traffic on the river is in seafood products and gravel shipped by barges; yachtsmen use it extensively.

(247) The controlling depth from the entrance to within 1 mile of a dam at the head of navigation was 2 feet at midchannel in July 1978. The channel is well marked for most of its length. The mean range of tide is 1.9 feet.

(248) Extensive small-craft facilities are at **Hance Point**, on the east side of North East River 2 miles above the mouth; at **Charlestown**, on the west side 2.5 miles above the mouth; and at **Northeast Heights**, on the east side 3 miles above the mouth.

(249) A **special anchorage** is westward of Northeast Heights. (See **110.1 and 110.70a**, chapter 2, for limits and regulations.)

(250) **North East**, at the head of navigation 4.5 miles above the mouth of North East River, has good rail and highway connections. In August 1989, the controlling depths were less than 1 foot in the dredged channel leading to the basin, and also, in the basin. Gasoline and some supplies are available at a few of the fish piers.

